

**What is Claimed is:**

1. An apparatus for forming the thin film on an organic light-emitting diode component comprising:
  - an evaporation resource mechanism;
  - 5 a mixing chamber mechanism coupled to said evaporation resource mechanism;
  - a vacuum mechanism coupled to said mixing chamber mechanism, for generating vacuum in said mixing chamber mechanism;
  - 10 a fine tuning mechanism; and
  - a hollow revolving spindle mechanism having:
    - a hollow revolving spindle whose one end is pivoted to said mixing chamber mechanism;
    - a revolving arm coupled to the other end of said
    - 15 hollow revolving spindle and having a surface and a plurality of spraying holes disposed on the surface; and
    - a transmission mean having a driving resource and a transmitting body disposed around said hollow revolving spindle, such that said driving source drives the
    - 20 transmitting body and further said transmitting body drives said hollow revolving spindle.
2. The apparatus for forming the thin film on an organic light-emitting diode component according to claim 1, wherein said evaporation resource mechanism has two crucibles, two control
- 25 valves, a common mass flow controller, and a heating pipe coupled

to the two crucibles, such that the crucible is replaced with the other crucible by switching the two control valves, and the two crucibles use the common mass flow controller.

3. The apparatus for forming the thin film on an organic light-emitting diode component according to claim 1, wherein said  
5 mixing chamber mechanism has a temperature control type hollow body, a tank of a funnel shape disposed in the interior of the temperature control type hollow body, an opening disposed at the bottom of said temperature control type hollow body, and a fence  
10 gate disposed near the opening, so as to control the input and the output of the vapor.

4. The apparatus for forming the thin film on an organic light-emitting diode component according to claim 3, wherein the temperature control type hollow body has a concentrating chamber  
15 disposed above said temperature control hollow body, such that the concentrating chamber is coupled to the heating pipe of the crucible in any direction by the design of an arc surface and the vapor is concentrated at the opening properly to achieve an object of concentrating.

20 5. The apparatus for forming the thin film on an organic light-emitting diode component according to claim 3, wherein the temperature control type hollow body has an evaporation rate monitor disposed above the temperature control type hollow body for monitoring the evaporation rate according to any the  
25 evaporation material, such that the temperature of the crucible is

adjusted to keep the evaporation rate being in stable state by different evaporation rate and simultaneously because the proportion of each evaporation material is actual known, the quantity of each evaporation material can be controlled precisely.

5 6. The apparatus for forming the thin film on an organic light-emitting diode component according to claim 1 wherein said hollow revolving spindle mechanism further has at least two ferrofluid sleeves disposed around the upper and lower ends of the hollow revolving spindle and respectively coupled to the temperature  
10 control type hollow body and the evaporation chamber so as to prevent the hollow revolving spindle from air leakage during rotating.

7. The apparatus for forming the thin film on an organic light-emitting diode component according to claim 1, wherein said fine  
15 tuning mechanism disposed at the bottom of the temperature control type hollow body and having a tuning component, a elastic body whose of one end is disposed on the supporting plate and the other end is couple to the bottom of the temperature control type hollow body, and a supporting plate fixed to the ferrofluid sleeve by  
20 utilizing the tuning component, such that the height of the ferrofluid sleeve is adjusted to avoid different alignment between the center of the two ferrofluid sleeves deposited around the hollow revolving spindle and to avoid causing the hollow revolving spindle to damage the ferrofluid sleeves during rotating.

25 8. The apparatus for forming the thin film on an organic light-

emitting diode component according to claim 7, wherein said elastic body is a compressed spring type bellows and the tuning component is a tuning bolt.

9. The apparatus for forming the thin film on an organic light-emitting diode component according to claim 1, wherein said vacuum mechanism has a air-removal source and a air-removal pipe coupled to the inside of the evaporation chamber and the temperature control type hollow body, such that the air-removal source removes the air through the air-removal pipe from the evaporation chamber and the temperature control type hollow body to form a vacuum state.

10. The apparatus for forming the thin film on an organic light-emitting diode component according to claim 9, wherein said air-removal source is pump.

11. The apparatus for forming the thin film on an organic light-emitting diode component according to claim 1, wherein said small the distance between the spraying holes and the two ends of the revolving arm are, the bigger the diameters of the spraying holes are.

12. The apparatus for forming the thin film on an organic light-emitting diode component according to claim 1, wherein said diameters of the spraying holes are the same and the small the distance between the spraying holes and the two ends of the revolving arm are, the more the number of the spraying holes are.

13. The apparatus for forming the thin film on an organic light-emitting diode component according to claim 1, wherein said

- hollow revolving spindle mechanism has a spindle center disposed in the hollow spindle, for providing the vapor flowing through the spindle center, such that if cleaned necessarily, the spindle center can be directly replaced with a new one to avoid the cleaning of the
- 5 spindle center.